Amendments To the Claims

Claims 1-23 (Cancelled)

Claim 24 (Original): A system for use in analyzing multiple samples simultaneously by absorption detection, which system comprises:

(i) a planar array of multiple containers, into each of which can be placed a sample,

(ii) a light source for emitting light to pass through the planar array of multiple containers,

(iii) a photodetector, which is in line with the light source, is positioned in line with and parallel to the planar array of multiple containers, and comprises a linear array of photosensitive elements for receiving light passing through the planar array of multiple containers, wherein, upon illumination of a photosensitive element by light passing through the planar array of multiple containers, a pixel signal corresponding to the light received by the photosensitive element is generated,

(iv) an analog to digital converter, which converts the pixel signal for each illuminated photosensitive element to a digital value corresponding to the light received by the respective photosensitive element, and

(v) a processor, which receives the digital values and generates a plurality of output signals corresponding thereto, each output signal being a function of at least two digital values corresponding to the light passing substantially concurrently through two photosensitive elements.

Claim 25 (Original): The system of claim 24, wherein the processor selects one peak digital value and averages the selected digital value with four digital values, which correspond to pixel signals from photosensitive elements adjacent to the photosensitive element corresponding to the selected peak digital value, and wherein the output signals are a function of the averaged values.

Claim 26 (Original): The system of claim 24, wherein the processor selects one peak digital value and averages the selected digital value with at least a second digital value to generate averaged values and wherein the output signals are a function of the averaged values, and further comprising a display receiving the output signals and generating an electropherogram corresponding thereto.

Claim 27 (Original): The system of claim 24, wherein each pixel signal is converted into a sequence of digital values and the output signals are a function of an average over time of the sequence of digital values.

Claim 28 (Original): The system of claim 24, wherein the at least two digital values are selected to minimize long time drifts of the pixel signals to generate a substantially flat baseline of the pixel signals.

Claim 29 (Original): A method of processing a plurality of pixel signals, each generated by one element of an array of photosensitive elements illuminated by light passing through a planar array of multiple containers, said method comprising:

converting each of the pixel element signals into a digital value corresponding to the light received by one of the photosensitive elements;

selecting, for each container, at least two digital values corresponding to the light received by two photosensitive elements; and

generating output signals corresponding to the light passing through the planar array of multiple containers, each output signal being a function of the selected digital values, wherein each output signal is a function of at least two digital values corresponding to the light passing substantially concurrently through two photosensitive elements, respectively.

Claim 30 (Original): A method of processing a plurality of pixel signals, each generated by one element of an array of photosensitive elements illuminated by light passing through a planar array of multiple containers, said method comprising:

converting each of the pixel element signals into a digital value corresponding to the light received by one of the photosensitive elements;

selecting, for each container, at least two digital values corresponding to the light received by two photosensitive elements;

generating output signals corresponding to the light passing through the planar array of multiple containers, each output signal being a function of the selected digital values; and

selecting one peak digital value and averaging the selected digital value with four digital values, which correspond to pixel signals from photosensitive elements adjacent to the photosensitive element corresponding to the selected peak digital value and wherein the output signals are a function of the averaged values.

Claim 31 (Original): A method of processing a plurality of pixel signals, each generated by one element of an array of photosensitive elements illuminated by light passing through a planar array of multiple containers, said method comprising:

converting each of the pixel element signals into a digital value corresponding to the light received by one of the photosensitive elements;

selecting, for each container, at least two digital values corresponding to the light received by two photosensitive elements;

generating output signals corresponding to the light passing through the planar array of multiple containers, each output signal being a function of the selected digital values; and

selecting one peak digital value and averaging the selected digital value with at least a second digital value to generate averaged values and wherein the output signals are a function of the averaged values, and further comprising displaying an electropherogram corresponding to the output signals.

Claim 32 (Original): A method of processing a plurality of pixel signals, each generated by one element of an array of photosensitive elements illuminated by light passing through a planar array of multiple containers, said planar array of multiple containers arrayed to have at least portions of the containers extending generally parallel to one another in a first plane, said method comprising:

positioning the array of photosensitive elements non-parallel to the first plane;

converting each pixel signal into a sequence of digital values;

a digital value corresponding to the light received by one of the photosensitive elements;

selecting, for each container, at least two digital values corresponding to the light received by two photosensitive elements; and

generating output signals corresponding to the light passing through the planar array of multiple containers, wherein the output signals are a function of an average over time of the sequence of digital values.

Claim 33 (Original): A method of processing a plurality of pixel signals, each generated by one element of an array of photosensitive elements illuminated by light passing through a planar array of multiple containers, said method comprising:

converting each of the pixel element signals into a digital value corresponding to the light received by one of the photosensitive elements;

selecting, for each container, at least two digital values corresponding to the light received by two photosensitive elements, wherein the at least two digital values are selected to minimize long time drifts of the pixel signals to generate a substantially flat baseline of the pixel signals; and

generating output signals corresponding to the light passing through the planar array of multiple containers, each output signal being a function of the selected digital values.

Claim 34 (Original): A system for use in analyzing multiple samples simultaneously by absorption detection, which system comprises:

(i) a planar array of multiple containers, into each of which can be placed a sample,

(ii) a light source for emitting light to pass through the planar array of multiple containers,

(iii) a photodetector, which is in line with the light source, is positioned in line with and parallel to the planar array of multiple containers, and comprises a linear array of photosensitive elements for receiving light passing through the planar array of multiple containers, wherein, upon illumination of a photosensitive element by light passing through the planar array of multiple containers, a pixel signal corresponding to the light received by the photosensitive element is generated,

(iv) an analog to digital converter, which converts the pixel signal for each illuminated photosensitive element to a digital value corresponding to the light received by the respective photosensitive element, and

(v) a processor, which receives the digital values and generates a plurality of output signals corresponding thereto, each output signal being a function of at least two digital values corresponding to the light received by two photosensitive elements, respectively, so that the output signals correspond to the light passing through the planar array of multiple containers.